UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/525,515	09/02/2005	Stefan Kluge	2732-165	7863

6449 7590 10/30/2007

ROTHWELL, FIGG, ERNST & MANBECK, P.C.
1425 K STREET, N.W.
SUITE 800
WASHINGTON, DC 20005

EXAMINER	
LAWSON, MATTHEW P	

ART UNIT	PAPER NUMBER
2871	

NOTIFICATION DATE	DELIVERY MODE
10/30/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PTO-PAT-Email@rfem.com

Office Action Summary	Application No.	Applicant(s)	
	10/525,515	KLUGE, STEFAN	
	Examiner	Art Unit	
	Matthew P. Lawson	2871	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *26 July 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-9,11,12,14 and 15* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-9,11,12,14,15* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. Applicant's amendment filed 26 July 2007 has been received and entered. **Claims 1-9, 11, 12, 14 and 15** are currently pending in this application.

Response to Arguments

2. Applicant's arguments with respect to the claims have been considered but are not persuasive.

3. In response to applicant's arguments (on pg. 5) that Arai fails to teach or suggest that the reflection layer can be applied onto a base surface of a recess formed in a semifinished product, the examiner disagrees.

4. The examiner expressly notes that by virtue of the reflective layer (8) of Arai being located at the inferior surface of polarizing plate (1'), the reflective layer of Arai can be seen to be applied to the base surface of the recess provided in the card body (10a) in order to accommodate the display (12) (see Arai, Fig. 2; ¶ [0018, e.g.]). Though the card body (10a) may be formed by lamination or injection molding, the end result of the forming process includes the reflective layer in contact with, or applied to, the base surface of the recess in the card body which accommodates the display, as shown in, e.g., Fig. 2 of Arai.

5. In response to applicant's arguments (on pg. 5-6) that Arai fails to disclose manufacturing a semifinished product in which the countercontact surfaces are exposed for subsequent reception of a display, it is noted that Gundlach cures this deficiency of Arai, as outlined in the rejection of claim 1, and Arai teaches applying a reflection layer onto a base surface of a recess formed in the display, as discussed above.

6. In view of the above, the applicant's arguments are not found to be persuasive, and the examiner maintains the previous grounds of rejection.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. **Claims 6-9 and 12** are rejected under 35 U.S.C. 102(b) as being anticipated by Arai et al (Arai), Japanese Laid-Open Patent Application Publication No. 11-120312.

9. Regarding claims 6 and 12, Arai discloses a chip card (i.e. portable data carrier) with a display device, comprising:

a. a card body (10a) with conductive paths (21) disposed in the interior of the card;

b. a recess located on a top side of the card, which accommodates a display (12);

c. countercontact surfaces (24) in the recess, which are formed by the conductive paths and which are contacted to contact surfaces (3) of the display; and

d. a reflection layer (8) applied onto a base surface of the recess, by virtue of the reflective layer being located at the inferior surface of polarizing plate (1') (Abstract; Figs. 2, 4, 5, 7, 8).

10. Arai further discloses the contact surfaces of the display to be directed towards the base surface of the recess. Specifically, the contact surfaces as disclosed by Arai are formed on transparent conductive layer (3), and are thereby directed towards the base surface of the recess (Figs 2, 4, 5, 7, 8).

11. Regarding claim 7, Arai further discloses the recess to be formed in a multi-step fashion, wherein the countercontact surfaces are formed on a step of the multi-step recess disposed between a top side of the card and a base surface, and wherein the display has a corresponding step with the contact surfaces formed thereon.

12. Specifically, the corresponding step as disclosed by Aral is formed by the extension of substrate (2) over substrate (5), and the contact surfaces are formed on transparent conductive layer (3) (Figs 2, 4, 5, 7, 8).

13. Regarding claim 8, Arai further discloses the contact surfaces and countercontact surfaces to be connected with an anisotropic conductive adhesive (20) (Fig. 5; ¶ [0057]).

14. Regarding claim 9, Arai also discloses the display to be flush with the top said of the card (Figs 2, 4, 5, 7, 8).

Claim Rejections - 35 USC § 103

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

16. **Claims 1-4, 11 and 14** are rejected under 35 U.S.C. 103(a) as being unpatentable over Arai in view of Gundlach et al. (Gundlach), US PGPub No. 2003/0073327 A1.

17. Regarding claims 1 and 11, Arai discloses a chip card with a display device, said chip card comprising:

a. a semifinished product (10a) with conductive paths (21) disposed in the interior;

b. a recess in the semifinished product;

c. countercontact surfaces (24) of the conductive paths in the recess;

d. a display (12) inserted into the recess so that:

i. the reflection layer (8) is applied to a base surface of the recess by virtue of the reflective layer being located at the inferior surface of polarizing plate (1'), and

ii. the display and the reflective layer form a reflective display; as well as

e. countercontact surfaces (25) contacted with the contact surfaces of the display (Arai, Figs 2, 4, 5, 7, 8).

18. The claimed method merely recites the steps of providing, producing, etc. the claimed elements, thereby producing a chip card with a display. Since each element must be formed to produce the chip card, Arai discloses the above claimed method steps.

19. But Arai fails to expressly disclose the countercontact surfaces to be uncovered, or the step of uncovering the countercontact surfaces.

20. However, Gundlach discloses a chip card with an optional display, wherein the conductive tracks in the interior of the chip card, and hence the counter contacts for the optional display are uncovered. Specifically, Gundlach discloses the electrical components to be accessible from the top side of the card, and a layer to have a cutout at the locations of the electrical contacts (Gundlach, ¶ [00024-0029, 0047]; Figs. 3 and 4).

21. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to make use of uncovered countercontact surfaces, as taught by Gundlach, in the chip card of Arai, in order to have a chip card with a display that has a construction as simple as possible (Gundlach, ¶[0026]).

22. Regarding claim 2, claim 1 is unpatentable over Arai in view of Gundlach as discussed above. Arai further discloses the recess to be formed in a multi-step fashion, wherein the countercontact surfaces are formed on a step of the multi-step recess disposed between a top side of the card and a base surface, and wherein the display has a corresponding step with the contact surfaces formed thereon.

23. Specifically, the corresponding step as disclosed by Arai is formed by the extension of substrate (2) over substrate (5), and the contact surfaces are formed on transparent conductive layer (3) (Arai, Figs 2, 4, 5, 7, 8).

24. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have the recess formed in a multi-step fashion in the chip card as taught by the combination of Arai and Gundlach, in order to reduce the number of components and simplify manufacture (Arai, ¶ [0015, 0064]).

25. Regarding claim 3, claim 1 is unpatentable over Arai in view of Gundlach as discussed above. Arai further discloses the contact surfaces and countercontact surfaces to be connected with an anisotropic conductive adhesive (20) (Arai, Fig. 5; ¶ [0057]).

26. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have the contact surfaces and countercontact surfaces be connected with an anisotropic conductive adhesive in the chip card as taught by the combination of Arai and Gundlach, in order to reduce the number of components and simplify manufacture (Arai, ¶ [0015, 0064]).

27. Regarding claim 4, claim 1 is unpatentable over Arai in view of Gundlach as discussed above. Arai also discloses the display to be flush with the top said of the card (Arai, Figs 2, 4, 5, 7, 8).

28. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have the display to be flush with the top said of the card in the chip card as taught by the combination of Arai and Gundlach, in order to reduce the number of components and simplify manufacture (Arai, ¶ [0015, 0064]).

29. Regarding claim 14, claim 1 is unpatentable over Arai in view of Gundlach as discussed above. Specifically, Arai discloses the reflecting layer (8) to be disposed on the bottom surface of polarizing plate (1'), and thereby applied to the bottom surface of the recess accommodating the display (12) (Fig. 2, e.g.; ¶ [0018]). Arai, then, can be seen to teach the reflection layer to be an integral part of the display (12).

30. Arai fails to expressly teach the reflection layer to not be a part of the display.

31. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made for the reflection layer of Arai to not be a part of the display,

since it has been held that constructing a formerly integral structure in various elements involves only routine skill in the art. *Nerwin v. Erlichman,* 168 USPQ 177, 179.

32. **Claim 5** is rejected under 35 U.S.C. 103(a) as being unpatentable over Arai in view of Gundlach, as applied to claim 1 above, and further in view of Moedl et al. (Moedl), German Patent No. DE 199 631 65.

33. Claim 1 is unpatentable over the combination of Arai and Gundlach, as discussed above.

34. Arai fails to expressly teach sealing gaps between the recess and the display inserted into the recess with a filling.

35. However, Moedl discloses a chip card including a recessed liquid crystal display wherein the gaps between the liquid crystal display and the recess are filled with a filling of either air or a suitable flexible material (Moedl, col. 5, ln. 65 – col. 6, ln. 5).

36. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to fill in the gaps as taught by Moedl in the chip card and method of Arai, in order to reduce the danger of fracture when the card is bent (Moedl, col. 5, ln. 65 – col.6, ln.5).

37. **Claim 15** is rejected under 35 U.S.C. 103(a) as being unpatentable over Arai.

38. Claim 6 is anticipated by Arai as discussed above. Specifically, Arai discloses the reflecting layer (8) to be disposed on the bottom surface of polarizing plate (1'), and thereby applied to the bottom surface of the recess accommodating the display (12) (Fig. 2, e.g.; ¶ [0018]). Arai, then, can be seen to teach the reflection layer to be an integral part of the display (12).

39. Arai fails to expressly teach the reflection layer to not be a part of the display.

40. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made for the reflection layer of Arai to not be a part of the display, since it has been held that constructing a formerly integral structure in various elements involves only routine skill in the art. *Nerwin v. Erlichman,* 168 USPQ 177, 179.

Conclusion

41. **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

42. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew P. Lawson whose telephone number is 571-272-9795. The examiner can normally be reached on Monday through Thursday from 8:00am to 6:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David C. Nelms, can be reached at 571-272-1787. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Matthew P. Lawson,
Examiner

MPL

ANDREW SCHECHTER
PRIMARY EXAMINER